## RI PUC Docket No. 4111 March 12, 2010 Commission Record Request Response of the Division of Public Utilities and Carriers

- Q. Please have Mr. Hahn produce a calculation of the rate of return assuming that the items that Mr. Moore described at the March 10, 2010 hearing are changed.
  Deepwater Wind will provide a copy of the revised IRR analysis referenced by Mr. Moore.
- A. On March 17, 2010, Deepwater Wind provided hard copies (not the electronic spreadsheets) of its revised IRR analysis referenced by Mr. Moore during his testimony on March 10, 2010. During this testimony, Mr. Moore discussed what he described as five "errors" in my IRR analysis. The items at issue were described by Deepwater Wind in writing as follows.
  - (A) Hahn assumption: The investment tax credit cash grant is distributed entirely to DWW. In the 80/20 leverage case, this results in negative project cash flow commencing in 2019, leading to potential debt default.

DW response: <u>The investment tax credit cash grant is distributed to lenders</u> (debt) and DWW (equity) pro rata in accordance with the debt-to-equity ratio.

(B) Hahn assumption: The projected capital spending curve for the project occurs over one year.

DW response: <u>DWW's spending curve occurs over four years.</u>

(C) Hahn assumption: The entire project cost qualifies for the cash grant and accelerated (MACRS) depreciation.

DW response: <u>Only a portion of the project cost qualifies, as real estate costs,</u> certain transmission costs, and certain financing costs do not qualify as either energy property or as appropriately capitalized expenses under tax rules.

(D) Hahn assumption: There is no debt service reserve.

DW response: <u>A debt service reserve</u>, typical of project finance transactions and an important protective feature required by lenders, will be needed.

(E) Hahn assumption: Depreciation benefits are treated as current cash flow. DW response: In reality, depreciation benefits will be treated as loss carry forwards because Deepwater, like most project developers, will not have adequate current income to take depreciation deductions on its tax return. I have reviewed the material provided by Deepwater Wind on March 17th. The five issues identified by Mr. Moore are, in fact, not errors but different assumptions made by Deepwater Wind subsequent to, and different from, the assumptions included in the IRR analysis (confidential) they provided to me in response to DIV 1-17. These differences in assumptions should not be characterized as errors, and Deepwater Wind's assertions that I have made mistakes or have done a disservice in this proceeding is a mischaracterization and must be rejected. The most significant areas of disagreement are items (A) and (E) above. In my IRR analysis, I assumed that the entire cash grant accrued to equity investors, and that the benefits of accelerated depreciation were reflected in current cash flows. These assumptions are commonly made in determinations of an IRR. In its revised IRR analysis, Deepwater Wind assumed that the cash grant was "shared" with the lenders pro rata to the capitalization structure, and that the benefits of accelerated depreciation were deferred until the latter years of the PPA when Deepwater Wind generates profits. Items (B), (C), and (D) combined have a much smaller impact on the resulting IRR.

As stated above, in the pro forma analysis provided by Deepwater Wind in response to DIV-1-17, Deepwater Wind assumed that the benefits of accelerated depreciation were reflected in current cash flows. Deepwater Wind also assumed that the entire cash grant accrued to equity investors, as that IRR analysis in the response to DIV-1-17 assumed 100% equity financing (*i.e.*, no debt). Also, Deepwater Wind did not include a Debt Service Reserve in its response to DIV-1-17. Thus, in the original IRR analysis provided by Deepwater Wind to the Division, Deepwater Wind made the three of the five "errors" that it accuses me of making. It was only after I raised the issue of a potentially excessive rate of return that Deepwater Wind introduced these different assumptions, which will result in a lower anticipated IRR. However, Deepwater Wind is not required to live by these assumptions. For example, if the PPA price is determined to be reasonable assuming the cash grant is shared with lenders and Deepwater Wind is able to negotiate debt covenants without such a provision, then the actual IRR will be much higher than expected using Deepwater Wind's assumptions. There will be no sharing of any upside potential with Rhode Island ratepayers.

Assuming a 50/50 capitalization structure and all of my other assumptions, the Deepwater Wind analysis provided on March 17<sup>th</sup> yielded an IRR of 22.5% compared to my value of 21.2%. Using the five different assumptions described by Mr. Moore on March 10<sup>th</sup>, Deepwater Wind's analysis yielded an IRR of 11.7%. I recalculated the IRR using Deepwater Wind's five different assumptions and the result was an IRR of 12.0% to 13.2%, a range of values close to but slightly higher than the value calculated by Deepwater Wind. Thus, it appears that the differences in IRR between Deepwater Wind and me are attributable to the assumptions and not in the math.

At the March 10<sup>th</sup> hearing, Deepwater Wind testified that its project might qualify for federal loan guarantees. Such loan guarantees would almost certainly result in a lower interest rate and may possibly eliminate any requirement for sharing of the cash grant with lenders and the Debt Service Reserve. Under these assumptions, the IRR could turn out to be higher than estimated by Deepwater Wind. The following table summarizes the IRRs that I calculated using Deepwater Wind's March 17<sup>th</sup> financial model. As shown in this table, the IRR ranges from 12.0% to 13.2%, using all of Deepwater Wind's assumptions. Using my assumptions (which are the same ones made by Deepwater Wind in its response to DIV-1-17), the IRR ranges from 20.0% to 24.8%, which compares favorably to my filed IRR of 21.2%. The addition of a federal loan guarantee increases the IRR to 22.4% to 28.1%.

RI PUC DOCKET NO. 4111 March 12, 2010 Record Request Review of Deepwater Wind Updated Pro Forma IRR Analysis (asuming a 50/50 capitalization structure)			
	Utilization of Cash Grant		
Benefits of accelerated depreciation	pre-pay loan	100% to equity investors	100% to equity investors with DOE loan guarantee
Deferred until DWW has taxable income	12.0% to 13.2%	13.5% to 15.2%	16.0% to 18.2%
Included in current cash flows	15.5% to 17.6%	20.0% to 24.8%	22.4% to 28.1%

Evaluation of a price in the absence of competing bids is difficult. I have therefore suggested a mechanism, an IRR analysis, to assist the Commission in making that determination.

Prepared by: Richard S. Hahn